associated content rights and information can be obtained about a user account associated with the particular media playback device. The user account can have associated usage rights. It can be determined, based on the information about the user account, whether the usage rights satisfy the content rights associated with the one or more media files and if the

5   usage rights do not satisfy the content rights, the transfer of the one or more media files to the particular playback device can be denied.

The information about the particular media playback device can include a unique device identifier and device capabilities for playing media files. A current time stamp can be generated and the current time stamp can be transferred to a secure location on the media

10   playback device. The expiration rules can include a maximum number of playbacks for the one or more media files, a relative expiration time for the one or more media files or an absolute expiration time for the one or more media files.

In general, in one aspect, this invention provides methods, apparatus, and systems, including computer program products, implementing and using techniques for updating

15   expiration rules for media files to be played on a media playback device. A request for updating expiration rules for one or more media files is received. Information about a particular media playback device is obtained. Current expiration rules for the one or more media files for which an update has been requested are obtained. The current expiration rules are compared with expiration rules stored on the content server for the one or more media

20   files to determine if the current expiration rules can be updated. If the current expiration rules can be updated, new expiration rules are transferred from a content server to the particular media playback device. If the current expiration rules cannot be updated, a user of the particular media playback device is requested to perform an action before the current expiration rules can be updated. If the user performs the requested action, new expiration

25   rules are transferred from the content server to the particular media playback device.

Advantageous implementations can include one or more of the following features. Transferring new expiration rules from the content server can include transferring the new expiration to a communication module that is operable to communicate with the playback device and transferring the new expiration rules from the communication module to the

30   playback device.

In general, in one aspect, this invention provides methods, apparatus, and systems, including computer program products, implementing and using techniques for playing a media file on a playback device. A user request to play the media file is received. The media file has one or more associated expiration rules. The one or more expiration rules associated

5   with the requested media file are read. It is determined, based on the one or more expiration rules, if the media file has expired. If the media file has expired, playback of the media file is refused until one or more new expiration rules have been obtained. If the media file has not expired, the media file is played to the user.

Advantageous implementations can include the following feature. A storage medium

10   on the particular playback device can be validated.

The invention can be implemented to realize one or more of the following advantages. Audio files provided with expiration information can be delivered to users' playback devices and their expiration can be securely controlled. Users may rent audio files for certain time period, download them as a promotional offer or try them out for a specific

15   time period. Content providers can impose different limitations, depending on what type of playback device the user has or what type of operation he or she wishes to perform on the files. For example, one fee can be charged for a one-time playback of the audio file, while another fee can be charged for unlimited playback, and yet another fee can be charged for a certain number of playbacks. Similarly, one fee can be charged for a 24 hour rental of the

20   music, while another fee can be charged for a month long rental of the music, and so on. Content providers can provide more extensive services, such as subscription programs or promotional programs, for music that has a high value.

The details of one or more implementations of the invention are set forth in the accompanying drawings and the description below. Other features and advantages of the

25   invention will be apparent from the description and drawings, and from the claims.

DETAILED DESCRIPTION OF THE DRAWINGS

FIG. 1 is a schematic diagram showing a delivery system for audio files having an associated expiration condition.

FIG. 2 is a flowchart showing a process for downloading audio files having an

30   associated expiration condition to a playback device.

FIG. 3 is a flowchart showing a process for playing audio files with an associated expiration condition.

FIG. 4 is a flowchart showing a process for refreshing an expiration condition for audio files that is stored on a playback device.

5   Like reference symbols in the various drawings indicate like elements.

DETAILED DESCRIPTION

The invention will be described below by way of example of audio files and a digital audio playback device. A schematic view of a system for delivering audio files with an expiration condition to a playback device in accordance with invention is shown in FIG. 1. A

10   similar system, in which the invention also can be applied, is described in commonly-owned U.S. patent application no. 09/894,846, filed June 27, 2001, which is hereby incorporated by reference in its entirety. As shown in FIG. 1, a system (100) for delivery of audio files to a particular device has a local side and a remote side. The concepts local side and remote side of the system are used here from a system user's (that is, consumer's) point of view.

15   In one implementation of the system, the remote side includes a content server (160) that interacts with the users' playback devices during a delivery of audio files to the users' audio playback devices. The content server (160) includes a web server (135), an application server (140), a user database (145), a content database (150), a device database (165), and a license server (170) with an associated user rights database (155). The different components

20   of the content server can be integrated into one or several physical units, depending on the needs of the service provider, and the units can be connected with conventional communication links. The devices at the local side of the system include devices that belong to users, such as a digital audio playback device (105,110) and optionally a pass-through device (115), such as a computer or set-top box, to which the user can connect an audio

25   playback device. Optionally the pass-through devices can have the functionality for playing audio files as well. A computer can, for example, function both as a pass-through device and a playback device. It should also be noted that pass-through devices are not limited to set-top boxes and computers. Virtually any device that can connect to a content server over a network such as the Internet and that is provided with a port (for example, a USB port) to

30   which a playback device can be connected can be used as a pass-through device.